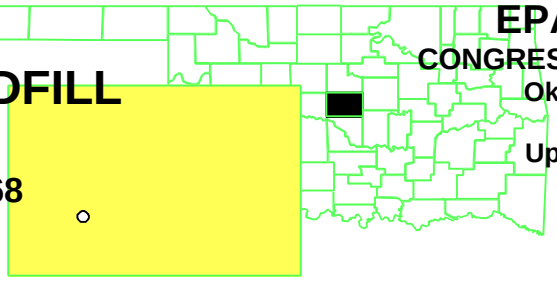
# MOSLEY ROAD SANITARY LANDFILL OKLAHOMA

**EPA ID# OKD980620868**



**EPA REGION 6**
**CONGRESSIONAL DISTRICT 05**
**Oklahoma County**

**Updated: 06/22/00**

## Site Description

**Location:**
- 3300 Mosley Road between NE 23rd and NE 36th Streets, 3 miles east of Oklahoma City, Oklahoma County

**Population:**
- Approximately 875 people live within a one-mile radius of the Site.
- An estimated 57,000 people, including residents of Spencer and Midwest City, obtain drinking water from public and private wells within three miles of the Site.

**Setting:**
- The landfill covers approximately 72 acres.
- Pesticides, industrial solvents, sludge, waste chemicals, and emulsions were deposited into three unlined pits.
- The pits are covered with approximately 80 feet of solid refuse and fill and a clay cap.

**Hydrology:**
- Two interconnected aquifers are present beneath the Site; the upper aquifer is associated with alluvial deposits of the North Canadian River and the lower one is associated with the Garber-Wellington Formation.
- The Garber-Wellington Formation is a primary ground water resource for the area.
- The combined aquifers range from 300 to 900 feet thick, with moderate to low permeability.
- Ground water is shallow (l0 to 20 feet) and soils moderately permeable, which facilitates movement of contaminants into ground water.

## Wastes and Volumes

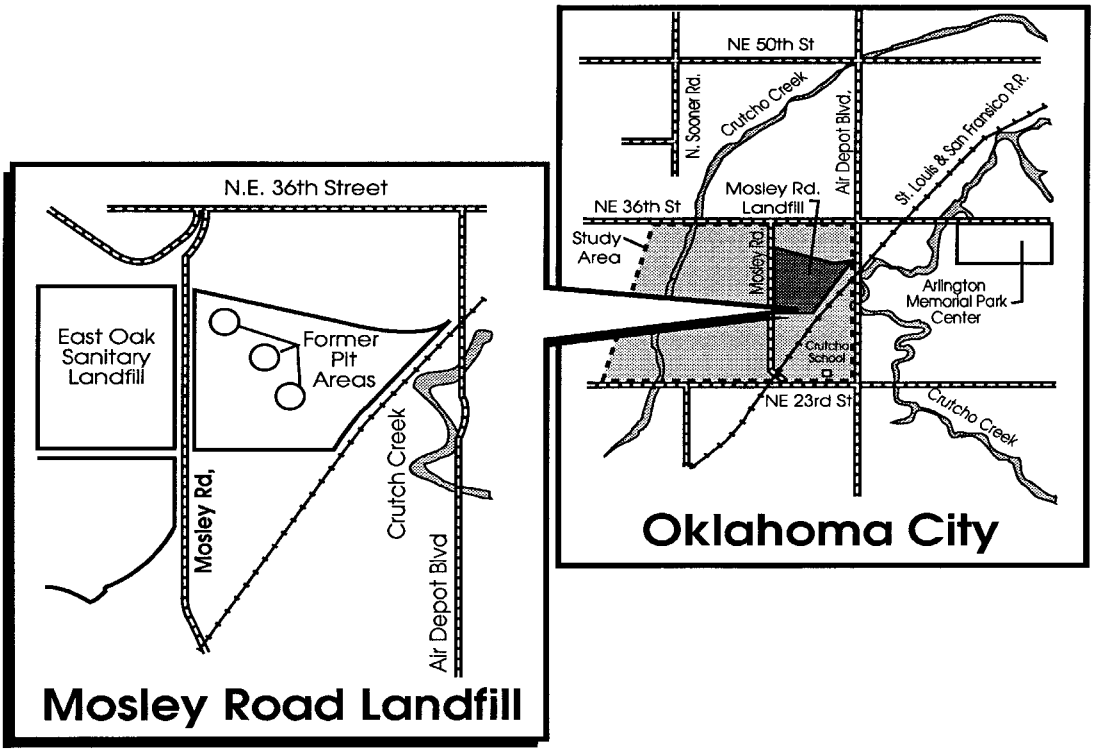
- The principal contaminants at the Mosley Road Site include industrial hazardous wastes deposited into three unlined, onsite pits, and benzene and vinyl chloride found in the ground water.
- Approximately two million gallons of industrial wastes were disposed into the on-Site pits while the landfill was operating.

## Site Assessment and Ranking

NPL LISTING HISTORY
Site HRS Score: 51.01
Proposed Date: 10/81
Final Date: 9/08/83
NPL Update: No. 1

! The primary comments received by EPA during the proposal comment period were from potentially responsible parties opposed to NPL proposal.

## Site Map and Diagram



## The Remediation Process

**Site History:**

! From February 20 through August 24, 1975, the Site accepted approximately two million gallons of primarily liquid hazardous waste in three unlined pits near the landfill's base.
! This was permitted by the Oklahoma State Department of Health (OSDH), now Oklahoma Department of Environmental Quality (ODEQ), under a Temporary Emergency Waiver for Hazardous Waste Disposal on February 20, 1976.
! The Temporary Emergency Waiver expired August 24, 1976.
! In 1988, a clay cap was placed on the landfill.
! On July 28, 1989, EPA, Waste Management of Oklahoma, Inc., and Mobile Waste Controls, Inc., entered into an Administrative Order on Consent for performance of the Remedial Investigation and Feasibility Study (RI/FS).

**Health Considerations:**

! Ground water is a significant source of drinking water in the area.

! Given the hydrogeology of the Site, there is significant potential for ground water contamination.

## Record of Decision

Signed: June 29, 1992

**Ground Water:**

! Restoration of ground water as a potential source of drinking water through natural attenuation.

! Continued ground water monitoring to determine if current conditions improve through time, remain constant, or worsen.

! Monitoring of leachate migration via ground water monitoring and periodic sampling

! Implementation of active ground water remediation contingencies if triggered by the contingency measure criteria.

**Soil Treatment:**

! Repair and improvement of the existing cap and addition of a vegetative soil layer.

**Additional Factors:**

! Access restrictions, including installation of signs, restrictions on future use of the property, fencing, and restrictions on use of ground water from Site water wells

! Implementation of a landfill gas monitoring system to prevent explosion or inhalation hazards.

| Other Remedies Considered | Reason Not Chosen |
|---|---|
| **Ground Water** | |
| 1. "No Action" | Not protective of human health and the environment. |
| 2. Source Containment, Ground Water Extraction, and Discharge | Possible non-compliance with water discharge. standards, not cost-effective. |
| 3. Alternative #2 and Slurry Wall | No reduction of toxicity, or volume. |
| 4. Alternative #2 with Treatment | Not cost-effective for sporadic ground water contamination. |
| 5. Alternative #4 with Slurry Wall | Same as #3. |
| 6. Source Containment, Leachate Extraction, Treatment and Discharge | Possible non-compliance with water discharge standards, not cost-effective, primarily treats only leachate from landfill. |
| 7. Alternative #6 and Slurry Wall | Same as #3 and #6. |
| 8. Source Containment, Ground Water and Extraction, Leachate Treatment and Discharge | Same as #2 and #6. |
| 9. Alternative #8 with GW treatment | Same as #4 and #6 |
| 10. Alternative #9 and Slurry Wall | Same as #3, #4 and #6 |
| **Source Control** | |
| 1. "No Action" | Not protective of human health and the environment. |
| 2. Repair Existing Cap, add 2 ft. of Clay Over Waste Pit Areas | Not cost-effective for the small gains in protectiveness |
| 3. Repair Existing Cap, add 2 ft. of Clay Over Entire Landfill | Not cost-effective for the small gains in protectiveness |

! EPA, the Oklahoma State Department of Health (OSDH), and Site PRPs are working together to implement the remedy chosen for the Mosley Road Landfill Superfund Site.

## Community Involvement

! Community Involvement Plan: Developed 12/89 - Revision under way.
! Open houses and workshops: 9/89, 2/90, and 4/92
! Original Proposed Plan Fact Sheet and Public Meeting: 4/92
! Original ROD Fact Sheet: 9/11/92
! Milestone Fact Sheets: 8/88, 6/89, 2/90, 12/91, ROD Fact Sheet
! Citizens on Site mailing list: 50
! Constituency Interest: Contamination and health effects of contaminated ground water.
! Site Repository: Ralph Ellison Library, 2000 Northeast 23rd, Oklahoma City, OK 73111

## Technical Assistance Grant

! Availability Notice: 06/13/89, re advertised 08/31/90
! Letters of Intent Received:
1) Environmental Pollution and Health Concerns Coalition (EPHCC) - 06/16/89 (w/drawn)

2) North Canadian Preservation Assoc. (NCPA) - 06/26/92

- Draft Application Received: NCPA submitted draft application for TAG on 11/11/92
- Grant Award: 09/13/93
- Budget Period: 09/01/93-08/31/96
- Grantee: North Canadian Preservation Assoc.
  Helen M. Longwith, President
  Oklahoma City. OK
- Current Status: TAG terminated 12/22/97 per request by grantee. TAG deobligated $48,011.

## Contacts

- **Remedial Project Manager (EPA):** Earl Hendrick, 214/665-8519, Mail Sta. 6SF-AP
- **State Contact:** Dennis Datin (ODEQ)
- **Attorney (EPA):** Amy McGee, 214/665-8063, Mail Sta. 6SF-DL
- **State Coordinator (EPA):** Roberta Hirt, 214/665-8079, Mail Sta. 6SF-AP
- **PRP-Lead Contact**: Mr. James Meinholz, Landfill General Manager, Waste Management of Okla., (405) 427-1112

## Present Status and Issues

- WMO has submitted the preliminary design for the ground water and cap components. EPA and ODEQ provided comments to WMO in March 1995. The final design was completed in the Fall of 1995.

- EPA approved the final design for the landfill gas management system which WMO will implement prior to commencing the cap improvements and the ground water monitoring activities. The Landfill Gas Management System is 100% complete.

- In the preliminary cap design, WMO proposed to use 1.2 million cubic yards of construction and demolition waste for fill. This would increase the size of the existing landfill significantly. This proposal was approved and application of construction demolition waste for fill is 65 % complete. Completion of the designed slope for the cap is the only component of the remedy that is not yet complete. 100% completion of the placement of construction debris should be accomplished by the second quarter of 2002

- Waste Management of Oklahoma has applied to the Oklahoma Department of Environmental Quality for a permit for lateral expansion of its East Oak Recycling and Disposal Facility that would cover this Site.

## Benefits

- Remediation of the Mosley Road Sanitary Landfill Superfund Site will reduce environmental risks for over 875 people within a 1 mile radius of the Site.

- Waste Management of Oklahoma continues to own this Site and also owns the adjacent East Oak Municipal Landfill. The remedy for this Mosley Road Site was permanent capping. Future land use will be limited to industrial use.